

Application No.: 10/577.614

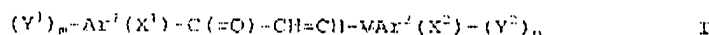
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Amendments to the Claims

1-38. (Cancelled)

39. (Currently Amended) A compound of the general formula I



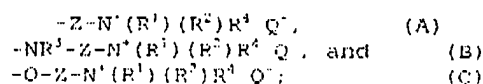
wherein

V designates ~~CH=CH~~Ar¹ and Ar² independently are selected from aryl;

m is an integer selected from the group consisting of 0, 1, and 2,

p is an integer selected from the group consisting of 0, 1, and 2,

wherein the sum of m and p is at least 1;

each Y¹ and Y² independently represents a substituent selected from A, B, and Cwherein Z is $-(CH_2)_n-$, wherein n is 1-4;

R¹, R² and R³ independently are selected from optionally substituted C₁₋₁₂-alkyl, optionally substituted C₂₋₁₂-alkenyl, optionally substituted C₆₋₁₂-alkadienyl, optionally substituted C₆₋₁₂-alkatrienyl, optionally substituted C₂₋₁₂-alkynyl, optionally substituted C₁₋₁₂-alkoxycarbonyl, optionally substituted C₁₋₁₂-alkylcarbonyl, optionally substituted aryl, optionally substituted aryloxy, optionally substituted arylcarbonyl, optionally substituted heteroaryl, optionally substituted heteroaryloxy, optionally substituted heteroarylcarbonyl, aminocarbonyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl; or R¹ and R² together with the nitrogen atom to which they are attached (-N(R¹)R²) form an optionally substituted nitrogen-containing heterocyclic ring;

R³ is selected from hydrogen, C₁₋₆-alkyl, and C₁₋₆-alkylcarbonyl, said alkyl and alkylcarbonyl optionally carrying substituent(s) selected from halogen, hydroxy, C₁₋₆-alkoxy, carboxy, C₁₋₆-alkoxycarbonyl, C₁₋₆-alkylcarbonyl, amino, mono- and di(C₁₋₆-alkyl)amino, and aryl optionally substituted 1-3 times with C₁₋₆-alkyl, C₁₋₆-alkoxy, nitro, cyano, amino or halogen; or R¹ and R² together form a biradical Z' which is as defined for Z;

Q is an anion;

X¹ and X² independently designate a substituent present 0-5 times on Ar¹ and Ar², respectively, each X¹ and X² independently being selected from the group consisting of optionally substituted C₁₋₁₂-alkyl, optionally substituted C₂₋₁₂-alkenyl, optionally substituted C₆₋₁₂-alkadienyl, optionally substituted C₆₋₁₂-alkatrienyl, optionally substituted C₂₋₁₂-alkynyl, hydroxy, optionally substituted C₁₋₁₂-alkoxy, optionally substituted C₂₋₁₂-alkenyloxy, carboxy, optionally substituted C₁₋₁₂-alkoxycarbonyl, optionally substituted C₁₋₁₂-alkylcarbonyl, formyl, C₁₋₆-alkylsulfonylamino, optionally substituted

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aryl, optionally substituted aryloxy, optionally substituted aryloxy, optionally substituted arylcarbonyl, optionally substituted arylamino, arylsulphonylamino, optionally substituted heteroaryl, optionally substituted heteroaryloxy, optionally substituted heteroarylcarbonyl, optionally substituted heteroarylamino, heteroarylsulphonylamino, optionally substituted heterocyclyl, optionally substituted heterocyclyloxy, optionally substituted heterocyclylcarbonyl, optionally substituted heterocyclylamino, heterocyclylsulphonylamino, amino, mono- and di(C₁₋₆-alkyl)amino, carbamoyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl, C₁₋₆-alkylcarbonylamino, amino-C₁₋₆-alkyl-carbonylamino, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-carbonylamino, cyano, guanidino, carbamido, C₁₋₆-alkoxy, C₁₋₆-alkylsulphonyl, C₁₋₆-alkylsulphonyl, C₁₋₆-alkylsulphonyloxy, aminosulfonyl, mono- and di(C₁₋₆-alkyl)aminosulfonyl, nitro, optionally substituted C₁₋₆-alkylthio, and halogen, where any nitrogen-bound C₁₋₆-alkyl is optionally substituted with hydroxy, C₁₋₆-alkoxy, C₂₋₆-alkenyloxy, amino, mono- and di(C₁₋₆-alkyl)amino, carboxy, C₁₋₆-alkylcarbonylamino, halogen, C₁₋₆-alkylthio, C₁₋₆-alkyl-sulphonyl-amino, or guanidino; and salts thereof.

40. (Original) The compound according to claim 39, wherein R¹, R² and R³ independently are selected from optionally substituted C₁₋₁₂-alkyl, optionally substituted C₁₋₁₂-alkenyl, optionally substituted C₁₋₁₂-alkynyl, optionally substituted C₁₋₁₂-alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, aminocarbonyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino C₁₋₆-alkyl-aminocarbonyl, and mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl.

41. (Original) The compound according to claim 39, wherein R¹ is selected from hydrogen and methyl.

42. (Currently Amended) The compound according to claim 39, wherein X¹ and X² independently designates 0-4 substituents, where such optional substituents independently are selected from optionally substituted C₁₋₁₂-alkyl, hydroxy, optionally substituted C₁₋₁₂-alkoxy, optionally substituted C₂₋₁₂-alkenyloxy, carboxy, optionally substituted C₁₋₁₂-alkylcarbonyl, formyl, C₁₋₆-alkylsulphonylamino, optionally substituted aryl, optionally substituted aryloxy, optionally substituted arylcarbonyl, optionally substituted arylamino, arylsulphonylamino, optionally substituted heteroaryl, optionally substituted heteroarylamino, optionally substituted heteroarylcarbonyl, optionally substituted heterocyclyl, optionally substituted heterocyclyloxy, optionally substituted heterocyclyl, optionally substituted heterocyclylamino, amino, mono- and di(C₁₋₆-alkyl)amino, carbamoyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl, C₁₋₆-alkylcarbonylamino, amino-C₁₋₆-alkyl-carbonylamino, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-carbonylamino, guanidino, carbamido, C₁₋₆-alkylsulphonyl, C₁₋₆-alkylsulphonyl, C₁₋₆-alkylsulphonyloxy, optionally substituted C₁₋₆-alkylthio, aminosulfonyl, mono- and di(C₁₋₆-alkyl)aminosulfonyl, and halogen, where any nitrogen-bound C₁₋₆-alkyl may be substituted with a substituent selected from the group consisting of hydroxy, C₁₋₆-alkoxy, and halogen.

43. (Original) The compound according to claim 39, wherein R¹, R² and R³ independently are selected from optionally substituted C₁₋₆-alkyl, optionally substituted C₁₋₆-alkylcarbonyl, heteroarylcarbonyl, aminocarbonyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, and mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl.

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44. (Original) The compound according to claim 39, wherein X^1 and X^2 independently designate 0-3 substituents, such optional substituents independently being selected from optionally substituted C_{1-6} -alkyl, hydroxy, optionally substituted C_{1-6} -alkoxy, carboxy, optionally substituted C_{1-6} -alkylcarbonyl, C_{1-6} -alkylsulphonylamino, optionally substituted aryl, optionally substituted aryloxy, optionally substituted arylamino, arylsulphonylamino, optionally substituted heteroaryl, optionally substituted heteroarylamino, heteroarylsulphonylamino, amino, mono- and di(C_{1-6} -alkyl)amino, carbamoyl, C_{1-6} -alkylcarbonylamino, guanidino, carbamido, optionally substituted C_{1-6} -alkylthio, optionally substituted heterocyclyl, optionally substituted heterocyclyloxy, optionally substituted heterocyclylamino and halogen, where any nitrogen-bound C_{1-6} -alkyl may be substituted with a substituent selected from the group consisting of hydroxy, C_{1-6} -alkoxy, and halogen.

45. (Cancelled)

46. (Original) The compound according to claim 39, wherein at least one of Ar^1 and Ar^2 is phenyl.

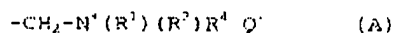
47. (Original) The compound according to claim 46, wherein both of Ar^1 and Ar^2 are phenyl, m is 1 or 2, and p is 0, 1 or 2.

48. (Original) The compound according to claim 39, wherein X^2 represents at least one substituent selected from C_{1-6} -alkyl, C_{1-6} -alkoxy, C_{1-6} -alkylcarbonyl, optionally substituted aryl, optionally substituted aryloxy, optionally substituted arylamino, optionally substituted heteroaryl, optionally substituted heteroarylamino, mono- and di(C_{1-6} -alkyl)amino, C_{1-6} -alkylcarbonylamino, optionally substituted C_{1-6} -alkylthio, optionally substituted heterocyclyl, optionally substituted heterocyclyloxy, optionally substituted heterocyclylamino and halogen.

49. (Original) The compound according to claim 39, wherein X^2 represents at least two halogen atoms.

50.-51. (Cancelled)

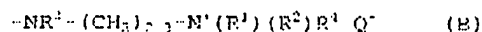
52. (Original) The compound according to claim 39, wherein one of Y^1 and Y^2 represents a substituent of the formula A



wherein R^1 , R^2 and R^3 are independently C_{1-6} -alkyl.

53. (Original) The compound according to claim 51, wherein Y^1 represents a substituent of the formula $-CH_2-N^+(R^1)(R^2)R^3 Q^-$.

54. (Original) The compound according to claim 39, wherein one of Y^1 and Y^2 represents a substituent of the formula B



wherein R^1 is selected from hydrogen and methyl, and R^1 , R^2 and R^3 are independently C_{1-6} -alkyl.

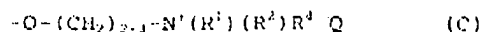
55. (Original) The compound according to claim 39, wherein one of Y^1 and Y^2 represents a substituent of the formula C

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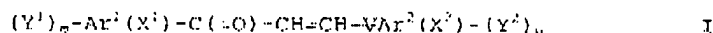


wherein R^1 , R^2 and R^3 are independently C_{1-12} -alkyl.

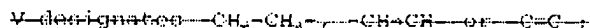
56. (Currently Amended) The compound according to claim 5239, wherein Ar^1 and Ar^2 both are phenyl.

57. (Original) The compound according to claim 39, which is selected from the group consisting of:
 (2-[3-[3-(2-Chloro-4-methoxy-phenyl)-3-oxo-propenyl]-3',5'-dimethyl-biphenyl-4-yloxy]-ethyl)-trimethyl-ammonium, iodide;
 (2-[3-[3-(4-Amino-phenyl)-3-oxo-propenyl]-3',5'-dimethyl-biphenyl-4-yloxy]-ethyl)-trimethyl ammonium, iodide;
 (2-[3-[3-(2-Amino-phenyl)-3-oxo-propenyl]-3',5'-dimethyl-biphenyl-4-yloxy]-ethyl)-trimethyl-ammonium, iodide;
 4-[3-[3-(2-Fluoro-4-methoxy-phenyl)-3-oxo-propenyl]-2'-methoxy-biphenyl-4-yl]-1,1-dimethyl-piperazin-1-ium, iodide;
 (3-[3-(4-Dibutylamino-phenyl)-acryloyl]-benzyl)-trimethyl-ammonium, iodide;
 3-[4-(2-Trimethylammonium-ethoxy)-biphenyl-3-yl]-1-(3-trimethylammonium-phenyl)-propanone, di-iodide; and
 3-[4-(2-trimethylammonium-ethoxy)-3',5'-dimethyl-biphenyl-3-yl]-1-(2-trimethylammonium-4-methoxy-phenyl)-propanone, di-iodide.

58. (Currently Amended) A method for treating bacterial infections caused by any one of Staphylococcus aureus; Staphylococcus intermedius; Enterococcus faecalis; Enterococcus faecium; Streptococcus pneumoniae; Streptococcus pyogenes; Streptococcus agalactiae; and Escherichia coli in a mammal comprising administration of a compound of the general formula I



wherein

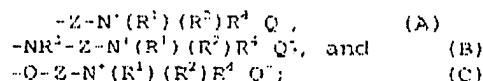


Ar^1 and Ar^2 independently are selected from aryl;

m is an integer selected from the group consisting of 0, 1, and 2,

p is an integer selected from the group consisting of 0, 1, and 2, wherein the sum of m and p is at least 1;

each Y^1 and Y^2 independently represents a substituent selected from A, B, and C



wherein Z is a biradical $-(C(R^H))_n-$, wherein n is an integer in the range of 1-6 and each R^H is independently selected from hydrogen and C_{1-12} -alkyl, or wherein $(R^H)_2$ is =O;

R^1 , R^2 and R^3 independently are selected from optionally substituted C_{1-12} -alkyl, optionally substituted C_{2-12} -alkenyl, optionally substituted C_{4-12} -alkadienyl, optionally substituted C_{6-12} -alkatrienyl, optionally substituted C_{2-12} -alkynyl, optionally substituted C_{1-12} -alkoxycarbonyl, optionally substituted C_{1-12} -alkylcarbonyl, optionally substituted aryl, optionally

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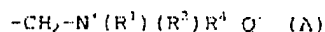
substituted aryloxy carbonyl, optionally substituted aryl carbonyl, optionally substituted heteroaryl, optionally substituted heteroaryloxy carbonyl, optionally substituted heteroaryl carbonyl, aminocarbonyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl; or R¹ and R² together with the nitrogen atom to which they are attached (-N(R¹)R²) form an optionally substituted nitrogen-containing heterocyclic ring;

R³ is selected from hydrogen, C₁₋₆-alkyl, and C₁₋₆-alkyl carbonyl, said alkyl and alkyl carbonyl optionally carrying substituent(s) selected from halogen, hydroxy, C₁₋₆-alkoxy, carboxy, C₁₋₆-alkoxycarbonyl, C₁₋₆-alkyl carbonyl, amino, mono- and di(C₁₋₆-alkyl)amino, and aryl optionally substituted 1-3 times with C₁₋₆-alkyl, C₁₋₆-alkoxy, nitro, cyano, amino or halogen; or R¹ and R³ together form a biradical Z' which is as defined for Z;

Q is an anion;

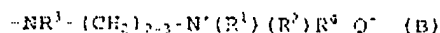
X¹ and X² independently designate a substituent present 0-5 times on Ar¹ and Ar², respectively, each X¹ and X² independently being selected from the group consisting of optionally substituted C₁₋₁₂-alkyl, optionally substituted C₂₋₁₂-alkenyl, optionally substituted C₃₋₁₂-alkadienyl, optionally substituted C₆₋₁₂-alkatrienyl, optionally substituted C₂₋₁₂-alkynyl, hydroxy, optionally substituted C₁₋₁₂-alkoxy, optionally substituted C₂₋₁₂-alkenyloxy, carboxy, optionally substituted C₁₋₁₂-alkoxycarbonyl, optionally substituted C₁₋₁₂-alkyl carbonyl, formyl, C₁₋₆-alkylsulphonylamino, optionally substituted aryl, optionally substituted aryloxy carbonyl, optionally substituted aryloxy, optionally substituted aryl carbonyl, optionally substituted arylamino, arylsulphonylamino, optionally substituted heteroaryl, optionally substituted heteroaryloxy carbonyl, optionally substituted heteroaryloxy, optionally substituted heteroaryl carbonyl, optionally substituted heteroaryl amino, heteroarylsulphonylamino, optionally substituted heterocyclyl, optionally substituted heterocycliloxy carbonyl, optionally substituted heterocycliloxy, optionally substituted heterocyclyl carbonyl, optionally substituted heterocyclyl amino, heterocyclylsulphonylamino, amino, mono- and di(C₁₋₆-alkyl)amino, carbamoyl, mono- and di(C₁₋₆-alkyl)aminocarbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl, C₁₋₆-alkyl carbonylamino, amino-C₁₋₆-alkyl-carbonylamino, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-carbonylamino, cyano, guanidino, carbamido, C₁₋₆-alkoxyloxy, C₁₋₆-alkylsulphonyl, C₁₋₆-alkylsulphinyl, C₁₋₆-alkylsulphonyloxy, aminosulphonyl, mono- and di(C₁₋₆-alkyl)aminosulphonyl, nitro, optionally substituted C₁₋₆-alkylthio, and halogen, where any nitrogen-bound C₁₋₆-alkyl is optionally substituted with hydroxy, C₁₋₆-alkoxy, C₂₋₆-alkenyloxy, amino, mono- and di(C₁₋₆-alkyl)amino, carboxy, C₁₋₆-alkyl carbonylamino, halogen, C₁₋₆-alkylthio, C₁₋₆-alkyl-sulphonyl-amino, or guanidino; and salts thereof.

59. (Previously Presented) The compound according to claim 39, wherein one of Y¹ and Y² represents a substituent of the formula A



wherein R¹, R² and R³ are independently C₁₋₆-alkyl.

60. (Previously Presented) The method according to claim 58, wherein one of Y¹ and Y² represents a substituent of the formula B



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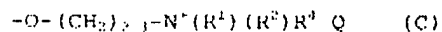
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wherein R³ is selected from hydrogen and methyl, and R¹, R² and R⁴ are independently C₁₋₆-alkyl.

61. (Previously Presented) The method according to claim 58, wherein one of Y¹ and Y² represents a substituent of the formula C



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